

WHAT IS CLAIMED IS:

1. A method of cooling a space or living beings within the space, the space defined at least in part by existing functional elements including at least one substantially liquid-tight passage-containing element, comprising:
 - a) providing at least one misting nozzle in operative association with the substantially liquid-tight passage-containing element; and
 - b) supplying liquid under pressure to flow through the existing substantially liquid-tight passage-containing element and confined thereby so that the liquid is supplied as a mist directly into the space through the nozzle to evaporatively cool the space or living beings within the space.
2. A method as recited in claim 1 wherein a) and b) are practiced using a hollow substantially rigid canopy frame component on a watercraft as the substantially liquid-tight passage-containing element.
3. A method as recited in claim 1 wherein a) and b) are practiced using a hollow substantially rigid rail or supporting frame on a watercraft as the substantially liquid-tight passage-containing element.
4. A method as recited in claim 1 wherein b) is practiced by supplying fresh water under a pressure of between about 200-1000 psi.
5. A method as recited in claim 1 wherein a) and b) are practiced to provide a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns in the space.
6. A method as recited in claim 1 wherein a) and b) are practiced to provide the mist through a portion of a light fixture.
7. A method as recited in claim 4 wherein a) and b) are practiced to provide the mist through a portion of a light fixture on a watercraft.
8. A method as recited in claim 4 wherein a) and b) are practiced to provide a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns in the space. ✓
9. A method of cooling a space, or humans within the space, on a watercraft in an aesthetically acceptable manner, by a) directly misting fresh

water into the watercraft space as a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns.

10. A method as recited in claim 9 wherein a) is practiced by supplying the water through an unobtrusive nozzle at a pressure of between about 200-1000 psi, and so that the source of the fresh water is not readily visible in the space.

11. A method as recited in claim 10 wherein a) is practiced to direct the mist downwardly into a space covered by a canopy on a deck portion of the watercraft, and wherein a) is further practiced by transporting the water directly through one or more hollow substantially rigid and water-tight frame elements supporting the canopy, and through a plurality of nozzles in communication with the hollow interior of the one or more frame elements.

12. A method as recited in claim 10 wherein when in the space the temperature is above 80 degrees F and the relative humidity is above 80%, a) is further practiced by chilling the water to a temperature between about 33-50 degrees F, and misting the chilled water into the space.

13. A method as recited in claim 10 wherein a) is practiced by supplying the mist from a plurality of nozzles mounted in a portion of a light fixture of the watercraft.

14. A method as recited in claim 10 wherein a) is practiced by supplying the mist from a plurality of nozzles mounted on at least one of an otherwise functional substantially rigid hollow rail or superstructure frame element of the watercraft.

15. A misting system for supplying a mist of liquid into a space to cool the space or living beings within the space, comprising:

a substantially water-tight passage-containing element which both defines a portion of the space and transports liquid to be misted directly into the space;

a nozzle operatively connected to the substantially water tight element and positioned to supply a mist of liquid from the passage-containing element directly into the space; and

a source of liquid under super-atmospheric pressure operatively connected to the passage-containing element.

16. A system as recited in claim 15 mounted on a watercraft to supply a mist of liquid directly toward a deck portion of the watercraft.

17. A system as recited in claim 16 wherein the passage-containing element comprises a component of a frame for supporting a canopy, a rail, a superstructure frame element, or a light fixture.

18. A system as recited in claim 15 wherein said nozzle has at least one orifice with a diameter of between about 0.2-0.5 mm.

19. A system as recited in claim 18 wherein said source of liquid under super-atmospheric pressure comprises a source of fresh water at a pressure of between about 200-1000 psi, and operatively connected through a regulator to said passage-containing element.

20. A system as recited in claim 15 wherein said passage-containing element comprises a substantially rigid and tubular element having a first end mounting said nozzle, a body having an exterior surface with external threading over at least a portion thereof, and a second end operatively connected to said source of liquid under super-atmospheric pressure, said external threading operatively engaging a structural element that in part defines said space.

21. A system as recited in claim 15 wherein said structural element comprises a light fixture substantially annular component, with an open interior of said annular component having an artificial light source therein.

22. A system as recited in claim 21 wherein a plurality of said nozzles are provided, each of which has a screw-threaded end which passes through a passage in said annular component, into a conduit connected to said source of liquid under super-atmospheric pressure.

23. A system as recited in claim 22 wherein said light fixture is on a watercraft.

24. A system as recited in claim 15 wherein a plurality of said nozzles are provided in a ceiling panel, unobtrusively extending downwardly therefrom.

25. A misting system comprising:

a substantially rigid and liquid-tight hollow element capable of withstanding at least 100 psi of liquid flowing therein;

at least one internally threaded opening formed in said element and having a land;

a misting nozzle having an orifice-containing end and a conduit end, said conduit end having a shaft and a ledge, said shaft including an externally threaded portion dimensioned and configured to be screwed threaded into said at least one internally threaded opening;

said misting nozzle externally threaded portion directly operatively engaging said internally threaded opening; and

a seal operatively disposed between said land and said ledge.

26. A system as recited in claim 25 wherein said seal comprises a ring of material which provides a substantially liquid-tight seal between said hollow element and said nozzle.

27. A system as recited in claim 25 wherein said nozzle has at least one orifice with a diameter of between about 0.2-0.5 mm.

28. A system as recited in claim 27 further comprising a source of fresh water at a pressure of between about 200-1000 psi, and operatively connected through a regulator to said hollow element.

29. A system as recited in claim 28 wherein said hollow element comprises a boat canopy frame element, a boat rail, or a boat superstructure element, and wherein said nozzle is positioned to mist water toward a deck area of a boat mounting said hollow element.

30. A system as recited in claim 29 further comprising a plurality of said nozzles operatively connected to said hollow element, each nozzle supplying a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns toward said boat deck.

31. A landscape or agricultural misting system comprising: an elongated plastic pipe having a first end for insertion into the ground and a second end with a T-piece, and an opening in said T-piece opposite said pipe; a conduit capable of transporting water under pressure and having a coupling; a misting nozzle;

and a nozzle extender passing through said opening and having a first end in operative association with said coupling and a second end operatively connected to said nozzle so that water under pressure passing through said conduit may pass through said coupling, into said extender, and mist out of said nozzle.